

ABSTRACT

Provided in a catalyst system are: a first reaction part fitted with a first catalyst containing, as active constituents, at least, a complex oxide consisting of two or
5 more oxides selected from among silica, alumina, titania, zirconia, and tungsten oxide, and a rare earth metal or transition metal (except Cu, Co, Ni, Mn, Cr, and V); and a second reaction part fitted with a second catalyst containing, as active constituents, at least, a noble metal and a
10 silica-alumina type complex oxide.